

WHAT IS CLAIMED IS:

1. An open and close mechanism for a recording medium insertion path, for inserting a recording medium into a mechanical body of a record playback device and ejecting the same therefrom, comprising:

a recording medium insertion path allowable to pass the recording medium therethrough;

an open and close device for opening and closing the recording medium insertion path; and

a locking device for locking open and close operation of the open and close device when the open and close device closes the recording medium insertion path.

2. The open and close mechanism for a recording medium insertion path according to claim 1, further comprising a driving device for operating said open and close device to open the recording medium insertion path, and the driving device installed in the mechanical body, wherein said locking device releases a locking condition of the open and close device when the driving device operates the open and close device to open the recording medium insertion path.

3. The open and close mechanism for a recording medium insertion path according to claim 2, wherein said open and close device comprises:

an open and close door provided rotatably about a center of a pivot shaft extending along a direction of width of the recording medium insertion path and rotating about the center

of said pivot shaft for opening and closing the recording medium insertion path;

5 a door gear rotating together with the open and close door operation of opening and closing the recording medium insertion path; and

an energizing device for energizing the door gear for closing the open and close door of the recording medium insertion path, wherein the door gear is rotated by the driving device for opening the open and close door of the recording medium insertion path, wherein the locking device locks the open and close door rotating about the center of the pivot shaft when closing the recording medium insertion path and allows the open and close door rotating about the center of the pivot shaft when the driving device rotating the door gear.

15 4. The open and close mechanism for a recording medium insertion path according to claim 3, wherein said locking device comprises:

20 a cam member being rotated together with the door gear by the driving device when the driving device rotates the door gear;

a convex portion projecting toward the pivot shaft from the cam member; and

25 a concave portion formed concavely on an outer surface of the pivot shaft, wherein the convex portion goes into the concave portion to lock the open and close door rotating about the center of the pivot shaft when the open and close door closing

the recording medium insertion path, wherein the cam member rotates together with the door gear for moving the convex portion in the concave portion and getting the same out the concave portion to allow the open and close door rotating about  
5 the center of the pivot shaft when the door gear is rotated by the driving device.